

References :

- Priest, C. D. 1935. *The Birds of Southern Rhodesia*. 3. London.
- Prigogine, Dr. A. 1960. La faune ornithologique du Massif du Mont Kabobo. *Ann. du Musée Royal du Congo Belge*, Tervuren. 85 : -146.
- Sassi, M. and Zimmer, F. 1941. Beiträge zur Kenntnis der Vogelwelt des Songea-Distriktes mit besonderer Berücksichtigung des Matengo-Hochlandes. *Ann. Naturhist. Mus. Wien* 51 : 236-346.
- Schouteden, Dr. H. 1955. De Vogels van Belgisch Congo en van Ruanda-Urundi. Pt. 7. *Ann. du Musée Royal du Congo Belge*. Tervuren Zoologie 5 : fasc. 2, 227-518.
- Smithers, R. H. N., Irwin, M. P. S., and Paterson, M. L. 1957. *A Check List of the Birds of Southern Rhodesia*. Cambridge, London.
- White, C. M. N. 1961. The African Rough-winged Swallows. *Bull. B.O.C.* 81 : 29-33.
- Wild, H. 1956. The principle Phytogeographic elements of the Southern Rhodesian flora. *Proc. Trans. Rhod. Sci. Assoc.* 44 : 53-62.

On the polytypic variation of the Red-billed Oxpecker *Buphagus erythrorhynchus* (Stanley), with the characters of a new subspecies

by P. A. CLANCEY AND W. J. LAWSON

Received 17th January, 1961

The Red-billed Oxpecker *Buphagus erythrorhynchus* (Stanley), 1814: northern Abyssinia, is the more restricted in range of the two species of *Buphagus*, ranging from the southern Sudan, Uganda, the eastern borders of the Congo, Abyssinia, Eritrea and the Somalilands, southwards through eastern Africa to the Bechuanaland Protectorate, Southern Rhodesia, the Transvaal, Orange Free State, Swaziland, Natal and Zululand, and southern Portuguese East Africa. In many parts of its range, particularly in the south, it has been completely eradicated or sorely depleted in numbers through human agency in the form of game elimination and the mass dipping of cattle and other domestic stock. At the present time the populations of this species are arranged in two rather imperfectly understood subspecies, resulting from the original work of the German systematist, Hermann Grote (1927), who recognised two races: a pale northern form (*B. e. erythrorhynchus*) with a somewhat limited range, and another larger and darker one, *B. e. caffer* Grote, 1927: Palala River, Zoutpansberg, northern Transvaal, distributed from about the southern limits of the highlands of Kenya Colony south to the austral parts of the species' range. Grote's findings have been largely followed by later workers [see Sclater (1930); Sclater, in Jackson (1938); and Mackworth-Praed and Grant (1955)], though Chapin (1954) found the overlap in wing-measurements between the two taxa to be considerable and the differences in colour to be relatively slight, and was unwilling to accord recognition to *B. e. caffer*. Study of the variation in this species is complicated by the fact that considerable change is wrought in the colour of the feathers through the bleaching agency of the sun, series in museum collections from single localities are seldom extensive enough, while skins are extremely prone to rapid post-mortem cabinet colour change.

A direct comparison between recently taken material from the Transvaal (near topotypes of *B. e. caffer*) and specimens only a few years old from Abyssinia, Somaliland, and parts of Kenya Colony shows that *B. e.*

erythrorhynchus and topotypical *B. e. caffer* are only slightly differentiated in the colouration of the body plumage and scarcely at all in size. In topotypical *B. e. caffer* the wings of 10 ♂ ♀ measure 119–124 (121.3), and the tails 87–95 (91.0) mm., and the colour of the upper-parts is about Deep Greyish Olive/Hair Brown [Ridgway (1912) (pl. xlvi)], and the tail, when viewed ventrally, shows no suffusion of cinnamon, being wholly Hair Brown. In specimens of *B. e. erythrorhynchus* before us from Abyssinia, northern Kenya Colony and Somaliland the upper-parts are slightly lighter than in *B. e. caffer*, particularly over the head, the colour of the mantle being about Drab (pl. xlvi) or slightly greyer. On the under parts, the throat is rather paler than Drab (a greyish olive in *B. e. caffer*), the breast is rather less dusky, and the lower breast, abdomen and flanks are usually rather more suffused with warm buff, less whitish, than *B. e. caffer*, but the best racial character seems to be in the colouration of the rectrices, the series of *B. e. erythrorhynchus* before us having the under surfaces of the tails distinctly cinnamon tinged. In some of the better marked specimens the inner webs of the two outer pairs of rectrices exhibit a 4–6 mm. wide lateral band of Sayal Brown (pl. xxix), which feature does not occur in *B. e. caffer*, as understood on the basis of Transvaal topotypes in the Durban Museum collection.

While *B. e. erythrorhynchus* is not readily separable from *B. e. caffer* on the basis of size, some of the populations currently grouped in this taxon are indeed aggregates of much smaller sized birds than the latter race, particularly those of Somalia and adjacent coastal Kenya Colony. Three ♂ ♀ from Somalia (Ischia Baidoa; Mogadishu) have wings 108, 110, 110.5 (all rather worn), while a single example from Lamu, north-eastern Kenya Colony coast, has a wing of 113, and another one from M'koi a wing of 108 mm. The tails of these five birds measure 79–84 (82.6) mm. The Somali examples are also on the whole paler and more "desert-coloured" than any other specimens examined by us. The rumps are particularly pallid. In the high interior of Kenya Colony, Uganda and Abyssinia (highlands) the populations are composed of very much larger birds (wings of 11 ♂ ♀ 115–125.5 (118.4), tails 84.5–93 (87.5) mm. Chapin gives the wings of Abyssinian birds as 105–120 mm., but some of his specimens were obviously not from the highlands of that country, or else partially moulted birds still carrying juvenal remiges. It seems to us that *B. e. erythrorhynchus* auct., is a composite form of two quite well-marked subspecific taxa: a large-sized race of the elevated interior of north-eastern Africa with wings over 115 mm. in length, and a markedly smaller and rather paler one apparently more or less confined to the arid region of Somaliland and immediately adjacent areas in other territories. It is evident from a study of the pertinent literature that some workers have considered the latter populations to represent the nominate race, while the former are often placed along with the southern *B. e. caffer*—now seen to be incorrect in the light of the characters found to differentiate Transvaal topotypes of that race from the Abyssinian and Kenya Colony highland populations of the species. The question of allocating names to the two subspecies which comprise the taxon *B. e. erythrorhynchus* auct., will require to be held in abeyance pending the examination of much more extensive material from north-eastern Africa than presently available to us.

The northern limits of the range of *B. e. caffer* are not readily fixed on the basis of existing material, but two recently taken skins from the Kenya Colony highlands (South Kinangop; Lake Naivasha) collected by Mr. J. G. Williams seem to be intermediate between that race and the nominate one. Selater, in Jackson, also observed that the birds of Kenya Colony and Uganda are often intermediate. *B. e. caffer* is now found to be a race of the interior savannas of east central and southern Africa, ranging from the interior of South Africa and Southern Rhodesia, northwards through Northern Rhodesia, adjacent Nyasaland, and parts of western northern Portuguese East Africa to the interior and western districts of Tanganyika Territory, north of which it intergrades with the slightly differentiated occidental populations of *B. e. erythrorhynchus* as at present accepted.

In dealing with the characters of *B. e. caffer*, Mackworth-Praed and Grant describe the race as differing from the nominotypical form by being browner above, and warmer in tone of colour. As will be appreciated from a study of our observations on the actual differences segregating *B. e. caffer* of the Transvaal and *B. e. erythrorhynchus*, the former race is slightly darker and colder in tone on the upper-parts, and paler if anything below. It would appear that the two authors concerned based their assessment of the characters of *B. e. caffer* on material emanating from the populations of the humid eastern littoral of eastern and south-eastern Africa, and not wholly on the birds of the southern interior plateau. We now find that the populations of this oxpecker from the littoral of north-eastern Kenya Colony (Kilifi) and Tanganyika Territory, southwards through the lowlands of Portuguese East Africa to Zululand and (?) Natal are distinctly darker and more richly coloured than interior birds. In the case of the coastal Kenya Colony birds there is also a marked size difference (wings of 3 ♂ ♀ 109, 109, 110.5 mm.), and the rectrices are suffused with cinnamon, in these respects agreeing with the small-sized Lamu, M'koi and Somali birds discussed earlier in this paper, although, of course, differing abruptly in their darker, more saturated colouration. It seems to us that such populations are in all probability no more than minor links between the well differentiated populations of Somalia and the adjacent littoral of Kenya Colony and the darker and larger sized birds occurring slightly further south in coastal East and south-eastern Africa, which latter are readily distinguishable on the basis of much darker colouration from both *B. e. caffer* and *B. e. erythrorhynchus*. As no name seems to be available for this richly coloured coastal form of the Red-billed Oxpecker, we propose to name it

Buphagus erythrorhynchus scotinus, subsp. nov.

Type: ♂, adult. Panda, Inhambane district, Sul do Save, southern Portuguese East Africa (24° 02' S., 34° 45' E.). 21st September, 1960. collected by P. A. Clancey. In the collection of the Durban Museum.

Diagnosis: In newly moulted dress differs from *B. e. caffer* Grote, 1927: Palala River, Zoutpansberg, northern Transvaal, in being much darker and blacker on the upper-parts, wings and tail (mantle centre about Fuscous (pl. xlvi) as against Deep Greyish Olive/Hair Brown in *B. e. caffer*); darker over the sides of the head and neck, and on the under-parts,

darker on the throat and breast; on the lower breast, abdomen and flanks more richly coloured, being slightly more dusky than Chamois (pl. xxx) (whitish buff in *B. e. caffer*). Averaging slightly smaller in size.

Measurements: Wings of 10 ♂♀ 115–125 (118.7), tails 85.5–92 (89.0) mm.

Paratypical material: 16. Portuguese East Africa, 14; eastern Tanganyika Territory, 2.

Measurements of the Type: Wing (flattened) 125, culmen 20.5, tarsus 22, tail (moult) 80 mm.

Range: Humid coastal area of south-eastern and eastern Africa, ranging from (?) Natal (no recently collected specimens available), Zululand, southern Portuguese East Africa, and the northern parts of the same territory to the littoral of north-eastern Tanganyika Territory (west as far as the Usambara Mts.). Intergrades in coastal Kenya Colony with the small-sized, pale coloured populations of *B. e. erythrorhynchus* auct., and presumably to the west of its established range with *B. e. caffer*.

Remarks: The name chosen for the new race of Red-billed Oxpecker is from the Greek σκοτωος, dark, swarthy, etc., which is descriptive of its darker and more saturated colouration when compared with the other two named races.

Acknowledgements

We are grateful to Mr. John G. Williams, Ornithologist of the Coryndon Museum, Nairobi, for assistance and the loan of material from eastern and north-eastern Africa. We also extend our profound thanks to Dr. M. Corinta-Ferreira, of the Museu Dr. Alvaro de Castro, Lourenço Marques, for the loan of the Portuguese East African material housed in the collection of that institution.

References:

- Chapin, James P. *Birds of the Belgian Congo*, part iv, 1954, p. 177.
 Grote, H. *Ornithologische Monatsberichte*, vol. xxxv, 1927, p.13.
 Mackworth-Præd, C. W. and Grant, C. H. B. *Birds of Eastern and North Eastern Africa*, vol. ii, 1955, p. 721.
 Ridgway, R. *Color Standards and Color Nomenclature*, 1912.
 Sclater, W. L. *Systema Avium Aethiopicarum*, part ii, 1930, p. 671.
 Sclater, W. L. in Jackson, F. *Birds of Kenya Colony and the Uganda Protectorate*, vol. iii, 1938, p. 1302.

ADDENDUM

Since the above report on the polytypic variation of *Buphagus erythrorhynchus* was written, the Durban Museum has received ten further specimens from Kenya Colony, collected in January and February, 1961, by our taxidermist, Mr. M. O. E. Baddeley. This additional material confirms that two perfectly discrete races occur in the territory concerned. Four ♂♂ ♀ from Kachileba, Suam River, north-east of Mt. Elgon, have wings 116 (worn), 120, 121, 121.5, whereas 6 ♂♂ from Garissa, Tana River, have wings 109.5, 110, 110.5, 111, 111, 113.5 mm. The Garissa birds are also much paler, especially on the ventral surfaces, than those from near Mt. Elgon, and agree with the other xeric populations occurring further east in Somalia in respect of colour and size.

P.A.C. W.J.L.